

CLAIMS

WHAT IS CLAIMED

1. A disease gene for rheumatoid arthritis, which is a mutant of protooncogene Dbl transcribing an mRNA that encodes the cDNA of which the sequence from the 2679th to 2952nd bases is shown in SEQ ID NO: 1, which disease gene transcribes an mRNA encoding the cDNA of which the region from the 20th to 274th bases in SEQ ID NO: 1 is substituted with the sequence of SEQ ID NO: 2.
2. The cDNA of the disease gene of claim 1.
3. A DNA fragment, which is a part of the disease gene of claim 1 or the cDNA of claim 2, and contains the base sequence of SEQ ID NO: 3.
4. A protein which is an expression product of the disease gene of claim 1, wherein the amino acid sequence of the C-terminal is that shown in SEQ ID NO: 2.
5. A peptide, which is a part of the protein of claim 4, and contains partial sequence of the amino acid sequence shown in SEQ ID NO: 2.
6. An antibody against the protein of claim 4 or the peptide of claim 5.
7. A method for diagnosing rheumatoid arthritis, comprising the detection of the mRNA from the disease gene of claim 1 or the protein of claim 4, in a biological specimen.
8. A method for functionally complementing Dbl deficiency.